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Mr. Kenneth G. Mensing
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Land Field Operations Section
Division of Land/Noise Pollution Control
115A West Main Street
Collinsville, Illinois 62234

RECEIVED

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ILL. E.P.A. - DIST. C.
STATE OF ILLINOIS

Dear Sir:

Amoco Oil Company Riverfront Disposal Site

Please refer to prior correspondence on this subject. In March, 1980 Amoco agreed to stop all dumping in the subject area until an agreeable plan was developed to render this area environmentally acceptable. We have studied the problem and now propose a "Closure Plan" for this area. Unless you advise within 30 days that this plan is not acceptable to IEPA, we will initiate this closure plan.

Amoco retained the consulting firm of James D. Andrews Environmental Engineering, Inc., to appraise the environmental risks associated with our riverfront disposal site and the firm of John Mathes & Associates, Inc., to conduct subsurface exploration for that appraisal.

The significant findings of this investigation are:

1. The entire disposal site area is underlain by a layer of good clay ranging 12 to 20 feet in thickness. The level of the good clay is roughly centered at the mean low level of the Mississippi River.
2. Except for being in the flood plain of the Mississippi River, this site could readily have been converted into an environmentally acceptable waste disposal site.
3. There does not appear to be any measurable contamination of the deep aquifer.
4. There are permeable layers of natural soils between the clay layer and the deposited waste materials.



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5. There is a perched water table above the clay lens that shows some degree of pollution particularly at the south end. It drains very slowly toward the Mississippi River and the old bed of Wood River Creek.
6. Most of the dikes surrounding the disposal site were not designed to be impermeable, the exception being the 1977 built dike along the east side of the northern portion of the disposal area.
7. The wastes in the southern portion of the disposal site are leachable (actually liquid pits) and have been responsible for the observed minor seepage at the river side of the impoundment.
8. The significant environmental risks can be eliminated by construction of an impervious (bentonite slurry) wall around the disposal site with clay cover, surface drainage, and gas vents. *requires 4c4 permit*
9. The entire area should be monitored to assure the effectiveness of the containment.

As part of the subsurface investigation, we have installed a series of monitoring wells that will monitor the perched water table as well as the deep aquifer. Pertinent plots and profiles of the area are appended.

As you are aware, the USEPA RCRA regulations require that disposal sites be outside the 500 year flood plain of rivers. We recognize this as being protection against future erosion disrupting the enclosure. *re: 4c4*
Amoco's riverfront disposal site is in the 500 year flood plain; however, at this location the flood plain of the river is very wide and current velocity during flood stage is moderate. Erosion really is not likely to be a problem. The river bank is rip-rapped and Amoco has further protected its property here with heavy concrete rubble. Shore installations west of the disposal site reinforce our incentive to adequately protect against possible erosion.

Amoco proposes a "Closure Plan" for the Riverfront Disposal Site with three main objectives:

- A. Stop significant seepage of pollution into the Mississippi River by the end of 1981.
- B. Prevent further dumping of environmentally questionable materials.
- C. Render the site environmentally safe, neat in appearance, and secure for the future.

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Our plan to accomplish these results is as follows:

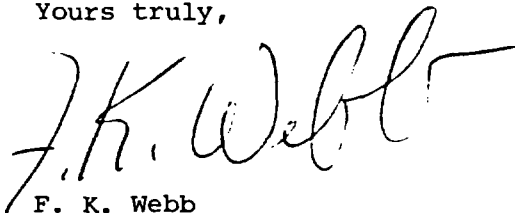
1. Remove surface puddles and establish surface drainage.
2. Construct a bentonite slurry wall in 1981 around the disposal area tied into the good east dike.
3. Fence the entire disposal area, cover with clay and a layer of top soil; then install vents and plant with grass.

Amoco believes this plan will eliminate the periodic seepage of pollution into the Mississippi River. Both the perched water table and the deep aquifer will be monitored to assure that objectives are being accomplished.

Amoco may install a fire drill field at the north end of the disposal site that would be drained into the refinery sewer system. Otherwise, the entire disposal site will be isolated.

We would be pleased to discuss any part of this plan or the subsurface exploration of this area with you or your representatives. As stated in the first paragraph of this letter, we plan to proceed with the foregoing unless we hear from you within 30 days that this plan is unacceptable. Unless we hear otherwise from you, we will be stockpiling nonhazardous materials on the site to implement this plan. ?

Yours truly,



F. K. Webb
Refinery Manager

RSM/de

Attachments